

Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended):

A method comprising:

receiving a plurality of communications along at least one input communication line;

and

framing each communication into a plurality of packets, each packet of said plurality

of packets containing destination information related to a destination module for a

predetermined amount of data contained within said each ~~packet~~ packet;

encoding a destination address field into said destination information of said each packet,

said destination address field identifying said destination module for said each packet;

and

encoding a destination slot field into said destination address field, said destination slot

field identifying said destination module for said each packet.

2. (original):

The method according to claim 1, wherein each communication of said plurality of communications comprises time division multiplexed (TDM) traffic and data traffic.

3. (original):

The method according to claim 2, wherein said framing further comprises:

framing said TDM traffic into at least one packet containing high priority data

transmitted during said each communication; and

framing said data traffic into at least one packet containing low priority data transmitted during said each communication.

4. (original):

The method according to claim 3, wherein said framing further comprises:

encoding a predetermined value into a priority field within said each packet, said

predetermined value indicating a priority of transmission for said predetermined amount of data within said each packet.

5. (original):

The method according to claim 4, wherein said priority field within said at least one packet containing high priority data has a zero value.

6. (original):

The method according to claim 4, wherein said priority field within said at least one packet containing low priority data has a one value.

7.-8. (cancelled)

9. (currently amended):

The method according to claim 1, ~~claim 7~~, wherein said ~~encoding method~~ further comprises:

encoding a time slot field into said destination address field, said time slot field indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module; and

encoding a line field into said destination address field, said line field indicating said output communication line.

10. (currently amended):

The method according to claim 1, ~~claim 7~~, wherein said ~~encoding method~~ further comprises:

encoding a timing source field into said destination address field, said timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

11. (currently amended):

The method according to claim 1, ~~claim 8~~, wherein said destination slot field comprises four bits to identify said destination module.

12. (original):

The method according to claim 9, wherein said time slot field comprises five bits to indicate said one destination time slot.

13. (original):

The method according to claim 9, wherein said line field comprises five bits to indicate said output communication line.

14. (original):

The method according to claim 10, wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

15. (currently amended):

A method comprising:

receiving a plurality of packets, each packet of said plurality of packets containing destination information related to a destination module for a predetermined amount of data contained within said each packet; ~~and~~

transmitting said each packet to said destination module based on said destination ~~information-~~information, wherein said destination information comprises a destination address field identifying said destination module for said each packet, wherein said destination address field comprises a time slot field, indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module, and a line field indicating said output communication line.

16. (cancelled)

17. (currently amended):

The method according to claim 15, ~~claim 16~~, wherein said destination address field comprises a destination slot field identifying said destination module for said each packet.

18. (cancelled)

19. (currently amended):

The method according to claim 15, ~~claim 16~~, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

20. (original):

The method according to claim 17, wherein said transmitting further comprises transmitting said each packet to said destination module based on said destination slot field of said destination address field.

21. (currently amended):

The method according to claim 15, ~~claim 18~~, wherein said transmitting further comprises storing said each packet into one storage module of a plurality of storage modules contained within said destination module based on said time slot field and said line field of said destination address field.

22. (original):

The method according to claim 21, wherein each storage module of said plurality of storage modules is a first-in-first-out (FIFO) storage module.

23. (original):

The method according to claim 21, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

24. (currently amended):

A method comprising:

retrieving a plurality of packets stored into a plurality of storage modules, each packet of said plurality of packets being retrieved from one storage module of said plurality of storage modules at a rate dictated by a destination address field contained within said each packet, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains available to transmit said each packet; and

multiplexing said each packet to obtain a communication to be transmitted along an output communication line.

25. (cancelled)

26. (original):

The method according to claim 24, wherein each storage module of said plurality of storage modules is a first-in-first-out (FIFO) storage module.

27. (original):

The method according to claim 24, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

28. (currently amended):

The method according to claim 24, ~~claim 25~~, wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

29. (original):

The method according to claim 28, wherein said timing source field indicates up to four timing domains to transmit said each packet.

30. (currently amended):

A system comprising:

means for receiving a plurality of communications along at least one input communication line; and

means for framing each communication into a plurality of packets, each packet of said plurality of packets containing destination information related to a destination module for a predetermined amount of data contained within said each ~~packet~~packet;

means for encoding a destination address field into said destination information of said each packet, said destination address field identifying said destination module for said each packet; and

means for encoding a destination slot field into said destination address field, said destination slot field identifying said destination module for said each packet.

31. (original):

The system according to claim 30, wherein each communication of said plurality of communications comprises time division multiplexed (TDM) traffic and data traffic.

32. (original):

The system according to claim 31, further comprising:

means for framing said TDM traffic into at least one packet containing high priority data transmitted during said each communication: and

means for framing said data traffic into at least one packet containing low priority data transmitted during said each communication.

33. (original):

The system according to claim 32, further comprising:

means for encoding a predetermined value into a priority field within said each packet,
said predetermined value indicating a priority of transmission for said predetermined
amount of data within said each packet.

34. (original):

The system according to claim 33, wherein said priority field within said at least one packet
containing high priority data has a zero value.

35. (original):

The system according to claim 33, wherein said priority field within said at least one packet
containing low priority data has a one value.

36.- 37. (cancelled)

38. (currently amended):

The system according to claim 30, ~~claim 36~~, further comprising:

means for encoding a time slot field into said destination address field, said time slot field
indicating one destination time slot of a plurality of destination time slots assigned to an
output communication line coupled to said destination module; and
means for encoding a line field into said destination address field, said line field
indicating said output communication line.

39. (currently amended):

The system according to claim 30, ~~claim 36~~, further comprising:

means for encoding a timing source field into said destination address field, said timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

40. (currently amended):

The system according to claim 30, ~~claim 37~~, wherein said destination slot field comprises four bits to identify said destination module.

41. (original):

The system according to claim 38, wherein said time slot field comprises five bits to indicate said one destination time slot.

42. (original):

The system according to claim 38, wherein said line field comprises five bits to indicate said output communication line.

43. (original):

The system according to claim 39, wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

44. (currently amended):

A system comprising:

means for receiving a plurality of packets, each packet of said plurality of packets containing destination information related to a destination module for a predetermined amount of data contained within said each packet; and

means for transmitting said each packet to said destination module based on said destination ~~information~~ information, wherein said destination information comprises a destination address field identifying said destination module for said each packet, wherein said destination address field comprises a time slot field, indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module, and a line field indicating said output communication line.

45. (cancelled)

46. (currently amended):

The system according to claim 44, claim 45, wherein said destination address field comprises a destination slot field identifying said destination module for said each packet.

47. (cancelled)

48. (currently amended):

The system according to claim 44, claim 45, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

49. (original):

The system according to claim 46, further comprising means for transmitting said each packet to said destination module based on said destination slot field of said destination address field.

50. (currently amended):

The system according to claim 44, ~~claim 47~~, further comprising means for storing said each packet into one storage module of a plurality of storage modules contained within said destination module based on said time slot field and said line field of said destination address field.

51. (original):

The system according to claim 50, wherein each storage module of said plurality of storage modules is a first-in-first-out (FIFO) storage module.

52. (original):

The system according to claim 50, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

53. (currently amended):

A system comprising:

means for retrieving a plurality of packets stored into a plurality of storage modules, each packet of said plurality of packets being retrieved from one storage module of said

plurality of storage modules at a rate dictated by a destination address field contained within said each packet, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains available to transmit said each packet; and

means for multiplexing said each packet to obtain a communication to be transmitted along an output communication line.

54. (cancelled)

55. (original):

The system according to claim 53, wherein each storage module of said plurality of storage modules is a first-in-first-out (FIFO) storage module.

56. (original):

The system according to claim 53, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

57. (currently amended):

The system according to claim 53, ~~claim 54,~~ wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

58. (original):

The system according to claim 57,

wherein said timing source field indicates up to four timing domains to transmit said each packet.

59. (currently amended):

A computer readable medium containing executable instructions, which, when executed in a processing system, cause said processing system to perform a method comprising:

receiving a plurality of communications along at least one input communication line; ~~and~~
framing each communication into a plurality of packets, each packet of said plurality of packets containing destination information related to a destination module for a predetermined amount of data contained within said each ~~packet~~-packet;

encoding a destination address field into said destination information of said each packet,
said destination address field identifying said destination module for said each packet;
and

encoding a destination slot field into said destination address field, said destination slot
field identifying said destination module for said each packet.

60. (original):

The computer readable medium according to claim 59, wherein each communication of said plurality of communications comprises time division multiplexed (TDM) traffic and data traffic.

61. (original):

The computer readable medium according to claim 60, wherein said framing further comprises:

framing said TDM traffic into at least one packet containing high priority data transmitted during said each communication; and

framing said data traffic into at least one packet containing low priority data transmitted during said each communication.

62. (original):

The computer readable medium according to claim 61, wherein said framing further comprises:

encoding a predetermined value into a priority field within said each packet, said predetermined value indicating a priority of transmission for said predetermined amount of data within said each packet.

63.-66. (cancelled)

67. (currently amended):

The computer readable medium according to claim 59, ~~claim 65~~, wherein said ~~encoding method~~ further comprises:

encoding a time slot field into said destination address field, said time slot field indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module; and

encoding a line field into said destination address field, said line field indicating said output communication line.

68. (currently amended):

The computer readable medium according to claim 59, ~~claim 65~~, wherein said ~~encoding~~ method further comprises:

encoding a timing source field into said destination address field, said timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

69. (currently amended):

The computer readable medium according to claim 59, ~~claim 66~~, wherein said destination slot field comprises four bits to identify said destination module.

70. (original):

The computer readable medium according to claim 67, wherein said time slot field comprises five bits to indicate said one destination time slot.

71. (original):

The computer readable medium according to claim 67, wherein said line field comprises five bits to indicate said output communication line.

72. (cancelled)

73. (currently amended):

A computer readable medium containing executable instructions, which, when executed in a processing system, cause said processing system to perform a method comprising:

receiving a plurality of packets, each packet of said plurality of packets containing destination information related to a destination module for a predetermined amount of data contained within said each ~~packet~~; packet, wherein said destination information comprises a destination address field identifying said destination module for said each packet, wherein said destination address field comprises a time slot field, indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module, and a line field indicating said output communication line; and

transmitting said each packet to said destination module based on said destination information.

74. (cancelled)

75. (currently amended):

The computer readable medium according to claim 73, ~~claim 74~~, wherein said destination address field comprises a destination slot field identifying said destination module for said each packet.

76. (cancelled)

77. (currently amended):

The computer readable medium according to claim 73, ~~claim 74~~, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

78. (original):

The computer readable medium according to claim 75, wherein said transmitting further comprises transmitting said each packet to said destination module based on said destination slot field of said destination address field.

79. (currently amended):

The computer readable medium according to claim 73, ~~claim 76~~, wherein said transmitting further comprises storing said each packet into one storage module of a plurality of storage modules contained within said destination module based on said time slot field and said line field of said destination address field.

80. (original):

The computer readable medium according to claim 79, wherein each storage module of said plurality of storage modules is a first-in-first-out (FIFO) storage module.

81. (original):

The computer readable medium according to claim 79, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

82. (currently amended):

A computer readable medium containing executable instructions, which, when executed in a processing system, cause said processing system to perform a method comprising:

retrieving a plurality of packets stored into a plurality of storage modules, each packet of said plurality of packets being retrieved from one storage module of said plurality of storage modules at a rate dictated by a destination address field contained within said each packet, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains available to transmit said each packet; and

multiplexing said each packet to obtain a communication to be transmitted along an output communication line.

83. (cancelled)

84. (original):

The computer readable medium according to claim 82, wherein each storage module of said plurality of storage modules is a first-in-first-out (FTFO) storage module.

85. (original):

The computer readable medium according to claim 82, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

86. (currently amended):

The computer readable medium according to claim 82, ~~claim 83~~, wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

87. (original):

The computer readable medium according to claim 86, wherein said timing source field indicates up to four timing domains to transmit said each packet.

88. (currently amended):

A system comprising:

a transmission module to

receive a plurality of communications along at least one input communication line
and to frame each communication into a plurality of packets, each packet of said
plurality of packets containing destination information for a predetermined
amount of data contained within said each ~~packet~~; packet,
encode a destination address field into said destination information of said each
packet, said destination address field identifying said destination module for said
each packet, and

encode a destination slot field into said destination address field, said destination slot field identifying said destination module for said each packet; and

a packet switch coupled to said transmission module to receive each packet of said plurality of packets and to transmit said each packet to a destination module based on said destination information.

89. (original):

The system according to claim 88, further comprising at least one timing device coupled to said packet switch, said transmission module, and said destination module to distribute at least one timing reference to said transmission module and said destination module.

90. (original):

The system according to claim 88, wherein said packet switch is a high-speed packet switch.

91. (original):

The system according to claim 88, wherein each communication of said plurality of communications includes time division multiplexed (TDM) traffic and data traffic.

92. (original):

The system according to claim 91, wherein said transmission module further frames said TDM traffic into at least one packet containing high priority data and said data traffic into at least one packet containing low priority data transmitted during said each communication.

93. (original):

The system according to claim 92, wherein said transmission module further encodes a predetermined value into a priority field within said each packet, said predetermined value indicating a priority of transmission for said predetermined amount of data within said each packet.

94. (original):

The system according to claim 93, wherein said priority field within said at least one packet containing high priority data has a zero value.

95. (original):

The system according to claim 93, wherein said priority field within said at least one packet containing low priority data has a one value.

96.-97. (cancelled)

98. (currently amended):

The system according to claim 88, ~~claim 96~~, wherein said transmission module further encodes a time slot field into said destination address field, said time slot field indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module and further encodes a line field into said destination address field, said line field indicating said output communication line.

99. (currently amended):

The system according to claim 88,~~claim 96~~, wherein said transmission module further encodes a timing source field into said destination address field, said timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

100. (currently amended):

The system according to claim 88,~~claim 97~~, wherein said destination slot field comprises four bits to identify said destination module.

101. (original):

The system according to claim 98, wherein said time slot field comprises five bits to indicate said one destination time slot.

102. (original):

The system according to claim 98, wherein said line field comprises five bits to indicate said output communication line.

103. (original):

The system according to claim 99, wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

104. (currently amended):

The system according to claim 88, ~~claim 97~~, wherein said packet switch further transmits said each packet to said destination module based on said destination slot field of said destination address field.

105. (original):

The system according to claim 98, wherein said packet switch further stores said each packet into one storage module of a plurality of storage modules contained within said destination module based on said time slot field and said line field of said destination address field.

106. (original):

The system according to claim 105, wherein each storage module of said plurality of storage modules is a first-in-first-out (FIFO) storage module.

107. (original):

The system according to claim 105, wherein each storage module of said plurality of storage modules has a capacity of four bytes and corresponds to one channel of said output communication line.

108. (original):

The system according to claim 88, wherein said destination module further retrieves said each packet stored into one storage module of a plurality of storage modules at a rate dictated by a destination address field encoded into said destination information of said each packet

and multiplexes said each packet to obtain an output communication to be transmitted along an output communication line.

109. (original):

The system according to claim 108, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains available to transmit said each packet.

110. (original):

The system according to claim 109, wherein said timing source field comprises two bits to indicate said predetermined number of timing domains.

111. (original):

The system according to claim 109, wherein said timing source field indicates up to four timing domains to transmit said each packet.

112. (original):

The system according to claim 89, wherein said transmission module and said destination module operate at a predetermined rate dictated by said at least one timing reference.

113. (new):

A system comprising:

a transmission module to

receive a plurality of communications along at least one input communication line and to frame each communication into a plurality of packets, each packet of said plurality of packets containing destination information for a predetermined amount of data contained within said each packet,

encode a destination address field into said destination information of said each packet, said destination address field identifying said destination module for said each packet, and

encode a time slot field into said destination address field, said time slot field indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module and further encodes a line field into said destination address field, said line field indicating said output communication line; and

a packet switch coupled to said transmission module to receive each packet of said plurality of packets and to transmit said each packet to a destination module based on said destination information.

114. (new):

The system according to claim 113, further comprising at least one timing device coupled to said packet switch, said transmission module, and said destination module to distribute at least one timing reference to said transmission module and said destination module.

115. (new):

The system according to claim 114, wherein said transmission module and said destination module operate at a predetermined rate dictated by said at least one timing reference.

116. (new):

The system according to claim 113, wherein each communication of said plurality of communications includes time division multiplexed (TDM) traffic and data traffic.

117. (new):

The system according to claim 113, wherein said transmission module further encodes a destination slot field into said destination address field, said destination slot field identifying said destination module for said each packet.

118. (new):

The system according to claim 117, wherein said packet switch further transmits said each packet to said destination module based on said destination slot field of said destination address field.

119. (new):

The system according to claim 113, wherein said transmission module further encodes a timing source field into said destination address field, said timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module.

120. (new):

The system according to claim 113, wherein said packet switch further stores said each packet into one storage module of a plurality of storage modules contained within said destination module based on said time slot field and said line field of said destination address field.

121. (new):

The system according to claim 113, wherein said destination module further retrieves said each packet stored into one storage module of a plurality of storage modules at a rate dictated by a destination address field encoded into said destination information of said each packet and multiplexes said each packet to obtain an output communication to be transmitted along an output communication line.

122. (new):

The system according to claim 121, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains available to transmit said each packet.

123. (new):

A system comprising:

a transmission module to

receive a plurality of communications along at least one input communication line
and to frame each communication into a plurality of packets, each packet of said

plurality of packets containing destination information for a predetermined amount of data contained within said each packet, encode a destination address field into said destination information of said each packet, said destination address field identifying said destination module for said each packet, and encode a timing source field into said destination address field, said timing source field indicating a predetermined number of timing domains for transmitting said each packet to said destination module; and a packet switch coupled to said transmission module to receive each packet of said plurality of packets and to transmit said each packet to a destination module based on said destination information.

124. (new):

The system according to claim 123, further comprising at least one timing device coupled to said packet switch, said transmission module, and said destination module to distribute at least one timing reference to said transmission module and said destination module.

125. (new):

The system according to claim 124, wherein said transmission module and said destination module operate at a predetermined rate dictated by said at least one timing reference.

126. (new):

The system according to claim 123, wherein each communication of said plurality of communications includes time division multiplexed (TDM) traffic and data traffic.

127. (new):

The system according to claim 123, wherein said transmission module further encodes a destination slot field into said destination address field, said destination slot field identifying said destination module for said each packet.

128. (new):

The system according to claim 127, wherein said packet switch further transmits said each packet to said destination module based on said destination slot field of said destination address field.

129. (new):

The system according to claim 123, wherein said transmission module further encodes a time slot field into said destination address field, said time slot field indicating one destination time slot of a plurality of destination time slots assigned to an output communication line coupled to said destination module and further encodes a line field into said destination address field, said line field indicating said output communication line.

130. (new):

The system according to claim 129, wherein said packet switch further stores said each packet into one storage module of a plurality of storage modules contained within said

destination module based on said time slot field and said line field of said destination address field.

131. (new):

The system according to claim 123, wherein said destination module further retrieves said each packet stored into one storage module of a plurality of storage modules at a rate dictated by a destination address field encoded into said destination information of said each packet and multiplexes said each packet to obtain an output communication to be transmitted along an output communication line.

132. (new):

The system according to claim 131, wherein said destination address field comprises a timing source field indicating a predetermined number of timing domains available to transmit said each packet.